

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-245224

(43)Date of publication of application : 01.09.1992

(51)Int.Cl.

G02F 1/1337

(21)Application number : 03-011052

(71)Applicant : TOSHIBA CORP

(22)Date of filing : 31.01.1991

(72)Inventor : KAWADA YASUSHI

TAKATO TAKAKI

SAITO HIROKO

(54) LIQUID CRYSTAL DISPLAY ELEMENT

(57)Abstract:

PURPOSE: To provide a uniform and stable condition of liquid crystal orientation and present a good reproducibility by subjecting the work for a liquid crystal display element to an orientation processing without resorting to the rubbing method.

CONSTITUTION: A liquid crystal display element is equipped with a pair of base boards 1, 2 facing with a certain distance apart from each other and liquid crystal 3 encapsulated in the gap between the base boards 1, 2, wherein the surface shapes of these mating surfaces of base boards 1, 2 are concave and convex periodically. On the mating surfaces, plastic film stretched over the convex surface is pressed while complying with the periodic convex/concave form to cause ductile elongation of the plastic film, and at the same time, this is fixed in tight attachment to the convex/concave surfaces. Thereby orientation buffer layers 14, 24 are formed.

